V. CLAIMS

This invention has the following claims:

1. Teaching of the design of the RTPTP polynomial of all orders for use in tracking, i.e. n ≥ 3. The minimum order of 3 is critical to track the moving objects that can change directions in any manner. Even the order 2 polynomial is part of this invention.

2. Teaching of the design of the RTPTP architecture is claimed to be unique.

3. Teaching of the integration of RTPTP polynomial with Geometric Pairing system (or any other system) is Creation of concept of the architecture of combining RTPTP polynomial with geometric pairing for very accurate prediction.

4. Teaching of the system design that uses RTPTP polynomial integrated with any other methods, including geometric pairing of any number of reference points.

5. Teaching of the system architecture that contains any number of reference points.

6. Teaching of explicit procedure that uses 4 points (or higher) for initialization and then subsequent continuous tracking of the objects.

7. Teaching of the reference system architecture of RTPTP as illustrated in Fig. 3.

8. Teaching of the design of distributed management architecture of object tracking with normal exchange of tracking information between one pair of reference points and a second pair of reference points.

9. Teaching of accurate tracking of both direct and indirect targets.

10. Teaching of accurate tracking of objects using any form of radio communications by preserving the algorithm transparency.

11. Teaching of accurate tracking of objects in-doors (including between the floors) and out-doors.

12. Teaching of accurate tracking of objects moving continuously between in-door and out-door.

13. Teaching of application of tracking in an all wireless network centric scenario that consists of any combination of integrated radio communications systems including all forms of radio communications.